

Claims

What is claimed is:

1 1. A method for performing a G.HS protocol handshake session between a
2 local device and a remote device, the method comprising:
3 establishing an identification for the remote device;
4 the local device generating a request signal to initiate a handshake session,
5 the request signal including an identification signal representative of the
6 identification;
7 the remote device receiving the request signal;
8 the remote device verifying the identification signal; and
9 the remote device generating a response signal.

1 2. The method of claim 1 further comprising:
2 establishing a local device identification for the local device; and
3 including an identification signal representative of the local device
4 identification in the response signal.

1 3. The method of claim 2 wherein the identification for the remote device and
2 the local device identification are the same.

1 4. The method of claim 1 wherein the request signal includes multiple tones
2 compatible with the G.HS protocol.

1 5. The method of claim 1 wherein the identification signal is comprised of a
2 number of bits thereby allowing adjacent device pairs in a cable bundle to have
3 unique identifications.

1 6. The method of claim 1 further comprising modulating the amplitude of the
2 request signal to include the identification signal.

1 7. The method of claim 1 further comprising modulating the frequency of the
2 request signal to include the identification signal.

1 8. The method of claim 1 further comprising configuring the request signal
2 with differential phase reversals to include the identification signal.

1 9. The method of claim 1 further comprising configuring the request signal
2 with an additional tone to indicate the identification signal.

1 10. A method for performing a handshake session between a local device
2 and a remote device, the method comprising:
3 establishing a remote identification corresponding to the remote device;
4 establishing a local identification corresponding to the local device;
5 the local device generating a request signal to initiate a handshake session,
6 the request signal including a remote identification signal representative of the
7 remote identification;
8 the remote device receiving the request signal;
9 the remote device verifying the remote identification signal;
10 the remote device generating a response signal including a local identification
11 signal representative of the local identification;
12 the local device receiving the response signal; and
13 the local device verifying the local identification signal.

1 11. The method of claim 10 wherein the remote and local identification
2 signals are each comprised of a number of bits thereby allowing adjacent local-
3 remote device pairs in a cable bundle to have unique remote and local
4 identifications.

1 12. The method of claim 10 wherein the remote identification and the local
2 identification are the same.

1 13. The method of claim 10 further comprising modulating the amplitude of
2 the request and response signals to include the remote and local identification
3 signals.

1 14. The method of claim 10 further comprising modulating the frequency of
2 the request and response signals to include the remote and local identification
3 signals.

1 15. The method of claim 10 further comprising configuring the request and
2 response signals with differential phase reversals to include the remote and local
3 identification signals.

1 16. The method of claim 10 further comprising configuring the request and
2 response signals with an additional tone to indicate the remote and local
3 identification signals.

1 17. The method of claim 10 wherein the remote and local identifications are
2 selected from POTS numbers associated with the remote and local devices.

1 18. The method of claim 10 further comprising the local device sending code
2 points to the remote device to indicate compatibility of remote and local device
3 identification.

1 19. The method of claim 10 further comprising separating the local and
2 remote identification signals into three octets within an identification field.

1 20. A method for performing a handshake session between a local device
2 and a remote device, the method comprising:

3 establishing a remote identification corresponding to the remote device;

4 the remote device transmitting the remote identification to the local device
5 upon an initial communication with the local device after installation of the remote
6 device;

7 storing the remote identification for use by the local device in a subsequent
8 communication with the remote device;

9 in a subsequent communication, the local device generating a request signal
10 to initiate a handshake session, the request signal including the remote
11 identification;

12 the remote device receiving the request signal; and
13 the remote device verifying the remote identification signal.

1 21. The method of claim 20 wherein the remote identification is comprised of
2 a number of bits thereby allowing adjacent device pairs in a cable bundle to have
3 unique identifications.

1 22. The method of claim 20 further comprising:
2 the remote device generating a response signal including a local identification
3 corresponding to the local device;
4 the local device receiving the response signal; and
5 the local device verifying the local identification.

1 23. The method of claim 22 wherein the local identification and the remote
2 identification are the same.

1 24. The method of claim 20 wherein the request signal includes multiple
2 tones compatible with a G.HS protocol.

1 25. The method of claim 20 further comprising modulating the amplitude of
2 the request signal to include the remote identification.

1 26. The method of claim 20 further comprising modulating the frequency of
2 the request signal to include the remote identification.

1 27. The method of claim 20 further comprising configuring the request signal
2 with differential phase reversals to include the remote identification.

1 28. The method of claim 20 further comprising configuring the request signal
2 with an additional tone to indicate the remote identification.

1 29. The method of claim 20 wherein the remote identification is selected from
2 a POTS number associate with the remote device.

1 30. The method of claim 20 further comprising the local device sending code
2 points to the remote device to indicate compatibility of remote device identification.

1 31. The method of claim 20 further comprising separating the remote
2 identification into three octets within an identification field.